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A Brief Summary of Economic Conditions

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FARM COMMODITY PRICES swirled in cross currents that carried wheat and cotton to seasonal lows and grain-fed cattle to new high figures during the past month. The early rush of wheat to market subsided, and interest centered on the marketing of this year's big crop of cotton. The world supply of cotton was reported the largest on record. Interest centered also on farmers' plans for feeding more livestock this fall and winter * * * But despite the decline in crop prices, farm income continues to exceed last year's figures, and during the remainder of this year is expected to top 1936 levels. Crop production is the largest in 9 years, but consumer buying power is high and food costs 18 percent less than in 1924-29. The purchasing power of nonagricultural income per capita for food is 106 percent of this base period. Increased marketings of farm products, times the price, are expected to yield farmers the biggest cash farm income since 1929.

Commodity Reviews

DEMAND: Continues Good

MOST indicators point to a continued good demand for farm products during the remainder of this year. General business activity has slackened in recent weeks, but even if it should go lower, buying power of consumers is unlikely to be greatly affected in the near future. The combined income of the nonfarm population continues to increase and is now around top figures for 7 years.

Activity in the woolen and cotton mills has slumped, and the production of coal, shoes, automobile tires, and furniture has been reduced; but back orders have been enough to keep some of the important industries going with little more than the usual summer lull. Whether the fall pick-up will be of usual proportions depends largely on the volume of new orders.

New orders to date have been disappointing; unless there is a material increase in new buying, the present volume of industrial production will not be continued much longer. But this would have little effect on the immediate demand for most farm products, since there is usually a lag between changes in business activity and consumer demand.

Exports of farm products were in small volume this summer, but exports are expected to increase as a result of the larger crops of cotton, wheat and some other products. The increase may materially reduce our import trade balance in the next 6 months.

The unsettled situation in the Far East and Europe has disturbed world trade, but business activity in most of the foreign industrial countries is being well maintained. Some improvement is expected in European business conditions this fall.

FARM INCOME: Small Gain

Farm income from marketings gained little from July to August, influenced chiefly by a falling off in

wheat marketings from their July peak. But the August figure was \$131,000,000 more than on the corresponding date last year, due wholly to increased income from crops rather than livestock.

During the first 8 months of this year the income from marketings and Government payments was \$681,000,000 more than in the same period last year, the increase coming chiefly from crops and from Government payments. Except for wheat, the gain reflected little of the increase in this year's crop production.

Marketings of many other farm products are expected to increase more than seasonally during the remainder of this year. And even though farm prices have declined from August figures, the larger marketings are expected to maintain farm income above last year.

The subjoined table gives the income figures for July and August 1936 and 1937.

| | From mar- ketings | From Gov- ernment pay- ments | Total |
|----------------|----------------------|------------------------------------|---------------|
| August 1937.. | \$766,000,000 | \$5,000,000 | \$771,000,000 |
| August 1936.. | 635,000,000 | 11,000,000 | 646,000,000 |
| July 1937..... | 740,000,000 | 11,000,000 | 751,000,000 |
| July 1936..... | 710,000,000 | 24,000,000 | 734,000,000 |

PRICES: Lower

Sharp declines in prices of cotton, grains, and hogs carried the farm price index as of September 15 down to a new low figure for this year. There was a slight recovery later in the month, but much more is needed to regain the midsummer price level.

The index of prices received by farmers in their local markets was 118 on September 15, compared with 123 on August 15. The buying power of farm products as of September 15 was 91 percent of prewar, compared with 98 percent a year earlier.

Index Numbers of Prices Received and Paid by Farmers

[1910-14=100]

| Year and month | Prices received | Prices paid | Buying power of farm products ¹ |
|----------------|-----------------|------------------|--|
| <i>1936</i> | | | |
| September..... | 124 | 127 | 98 |
| October..... | 121 | 127 | 95 |
| November..... | 120 | 127 | 94 |
| December..... | 126 | 128 | 98 |
| <i>1937</i> | | | |
| January..... | 131 | 130 | 101 |
| February..... | 127 | 132 | 96 |
| March..... | 128 | 132 | 97 |
| April..... | 130 | 134 | 97 |
| May..... | 128 | 134 | 96 |
| June..... | 124 | 134 | 93 |
| July..... | 125 | ² 133 | ² 94 |
| August..... | 123 | ² 132 | ² 93 |
| September..... | 118 | ² 130 | ² 91 |

¹ Ratio of prices received to prices paid.

² Preliminary.

Prices of Farm Products

Estimates of average prices received by producers at local farm markets based on reports to the Bureau of Agricultural Economics. Average of reports covering the United States weighted according to relative importance of district and States.

| Product | 5-year average August 1909-July 1914 | September average, 1909-13 | September 1936 | August 1937 | September 1937 | Parity price, September 1937 |
|--------------------------------|--------------------------------------|----------------------------|----------------|-------------|----------------|------------------------------|
| Cotton, lb.....cents.. | 12. 4 | 12. 2 | 12. 5 | 10. 7 | 9. 0 | 16. 7 |
| Corn, bu.....do..... | 64. 2 | 69. 6 | 104. 7 | 102. 6 | 93. 9 | 86. 7 |
| Wheat, bu.....do..... | 88. 4 | 87. 7 | 104. 3 | 99. 4 | 93. 0 | 119. 3 |
| Hay, ton.....dollars.. | 11. 87 | 11. 39 | 10. 87 | 8. 97 | 8. 91 | 16. 02 |
| Potatoes, bu.....cents.. | 69. 7 | 74. 4 | 113. 7 | 69. 8 | 53. 6 | 92. 2 |
| Oats, bu.....do..... | 39. 9 | 38. 8 | 43. 5 | 28. 5 | 29. 0 | 53. 9 |
| Soybeans, bu.....do..... | (¹) | (¹) | 110. 3 | 102. 1 | 89. 8 | ----- |
| Peanuts, lb.....do..... | 4. 8 | 4. 7 | 3. 7 | 3. 7 | 3. 4 | 6. 5 |
| Beef cattle, cwt.....dollars.. | 5. 21 | 5. 09 | 5. 88 | 7. 64 | 7. 54 | 7. 03 |
| Hogs, cwt.....do..... | 7. 22 | 7. 49 | 9. 68 | 11. 46 | 10. 55 | 9. 75 |
| Chickens, lb.....cents.. | 11. 4 | 11. 6 | 14. 9 | 16. 8 | 17. 4 | 15. 4 |
| Eggs, doz.....do..... | 21. 5 | 20. 5 | 24. 5 | 20. 4 | 22. 9 | ² 29. 3 |
| Butterfat, lb.....do..... | 26. 3 | 25. 8 | 35. 5 | 31. 6 | 33. 4 | ² 34. 3 |
| Wool, lb.....do..... | 17. 6 | 16. 9 | 26. 5 | 31. 4 | 30. 8 | 23. 8 |
| Veal calves, cwt.....dollars.. | 6. 75 | 6. 78 | 7. 42 | 8. 69 | 8. 91 | 9. 11 |
| Lambs, cwt.....do..... | 5. 87 | 5. 47 | 7. 43 | 8. 64 | 8. 57 | 7. 92 |
| Horses, each.....do..... | 136. 60 | 136. 10 | 90. 30 | 93. 60 | 93. 10 | 184. 40 |

¹ Prices not available.

² Adjusted for seasonality.

WHEAT: Bigger Supply

Latest reports indicate an increase of about 60,000,000 bushels in the world supply of wheat (excluding Soviet Russia and China) this year compared with last. For although the carry-over on July 1 was 210,000,000 bushels less than on that date last year, this year's world crop shows an increase of 270,000,000 bushels.

Most of the increase in production this year is in the United States. This country has wheat to sell in world markets. Supplies are small in most importing countries, but limiting sales factors are the relatively high prices of wheat, the reduced foreign supply of gold, and financial and trade difficulties in many countries.

Currently, it appears that the United States may export about 100,000,000

bushels during the 1937-38 season. This would leave a United States carry-over of about 200,000,000 bushels next July, or much less than the average for the 5 years 1930-34, when stocks were large.

Importing countries have bought little wheat and flour thus far this season, postponing purchases until the size of the Southern Hemisphere crops and Russian shipments should become known; but it is likely that buying will increase soon. Wheat prices broke sharply in early September but later recovered a part of the loss.

COTTON: Prices Break

A combination of factors—the big American crop, lessened mill activity, unsettled world trade conditions, and prospects of the biggest world supply of cotton in history—have broken cotton prices to the lowest figures in several years.

The carry-over of American cotton on August 1 was less than on that date last year, but this was partly offset by an increase in the foreign carry-over, and this year's United States crop is nearly 3,700,000 bales more than the 1936 outturn.

Mill consumption of cotton in the United States last season was the largest on record, but consumption of American cotton abroad was small. Recently the exports of cotton to Japan have been only a third of last year's volume.

The lower prices of American cotton are favorable to an increase in export sales, but the supply of foreign growths will probably be larger than last season, and developments in the Orient have materially reduced cotton consumption in China. In some countries synthetic fibers are being substituted for cotton; in a number of countries, however, cotton consumption continues high.

A disturbing factor in the United States textile situation is that mill sales of goods have been, for the most part, below production since last

March. Domestic mill activity, recently reduced, is now probably less than at this time last year, but apparently still quite high relative to most other years.

TOBACCO: Big Crop

The tobacco crop is about 25 percent larger than in 1936, but stocks are being reduced, so that supplies of most types are only little more than a year ago; a few types are in smaller supply. Good domestic demand for cigarette and cigar types and a significant increase in exports of flue-cured tobacco are in prospect during the next 12 months. The outlook for fire-cured tobacco is less certain; maintenance of last year's prices depends on demand conditions which cannot be adequately evaluated at this time.

The various grades of flue-cured tobacco have been selling at about last year's prices, and the season average is expected to be close to the 1936 average of 22 cents per pound. As for Burley and the dark-air-cured types, moderate price declines from the relatively high 1936 figures are considered as likely.

Maryland tobacco is expected to sell around last year's prices; for the various cigar types, prices about the same as, or a little higher than, last year are expected.

FRUITS: Good Demand

Apples are selling for less money this year than last, but the price times the big supply is expected to yield growers the largest gross income since 1930. Most of this year's production increase is in the Central and Atlantic Coast States; production in the Western States is about average.

Exceptionally large crops are reported for New York, Pennsylvania, Virginia, and West Virginia—in areas close to consuming markets. Appraisal of the markets indicates a good consumer demand for apples; and more apples will be shipped abroad,

since crops in most European countries are smaller this year.

Grapes are a big crop, but offsets include the smaller stocks of raisins, wine, and brandy. An improved demand for grapes this year is expected to cancel in part the effect of the large crop, so that prices may average only a little less than last year's. If prices can be maintained near 1936 figures, the gross cash income to grape growers may be the largest since 1929.

SUGAR: Big Crops

A record crop of Louisiana sugarcane for sugar, and the second largest crop of sugar beets since 1913 are indicated by the Bureau's estimate issued September 10. The cane crop had good weather—heat and rain—in September, and is expected to be about 5,000,000 tons. Production of this size would yield more than 400,000 tons of 96° raw sugar.

The September production estimate for sugar beets was 9,223,000 tons—a figure exceeded only once—in 1933, when the crop totaled 11,030,000 tons—in the last 24 years. Acreage was increased this year in the Arkansas and San Luis Valleys of Colorado, but high temperatures and a shortage of irrigation water have reduced yield prospects. Many California growers planted rather late this year and their yields have been running below earlier expectations.

TRUCK CROPS: Prices Up

Prices of most fresh vegetables rose sharply during the past month; how long the gains can be held is problematic in view of the prospects for plentiful market supplies during fall and early winter. Onions are the only major vegetable for which a reduced supply is indicated.

Latest Government crop estimates report the following production increases this year compared with last: Late snap beans, 72 percent; late cabbage, 26 percent; late carrots, 34 percent; late celery, 18 percent; late let-

tuce, 17 percent; late peas, 10 percent; tomatoes, 14 percent; late potatoes, 18 percent; sweetpotatoes, 17 percent.

Production of most vegetables for canning or manufacture also is much larger this year than last; big packs and lower prices of the leading canned vegetables are in prospect.

POTATOES: Prices Low

Potatoes continue low-priced, selling for less than half the prices at this time a year ago at both shipping points and terminal markets. Wisconsin growers were averaging only 54 cents per 100-pound sacks in mid-September compared with \$1.51 at the same time last year.

The low prices are the result of the increased production, indicated on September 1 at more than 403,000,000 bushels. This output is 73,000,000 bushels more than the relatively small 1936 crop, and 30,000,000 more than the 1928–32 average. Late-crop prospects declined in some States but improved in others, and the net was practically no change between August 1 and September 1.

Carlot shipments from the late States have increased in recent weeks (they will reach the season's peak in October), as shipments from the intermediate States decreased. The September 1 crop estimate indicated a total production of 114,000,000 bushels for the 8 Eastern late States compared with 107,000,000 in 1936.

The estimate indicated 124,000,000 bushels for the 10 Central late States, against 91,500,000 last season; and 90,700,000 bushels for the 12 Western States, compared with 79,500,000 bushels last year. Prices in Western markets are expected to average lower than prices in the eastern cities.

CATTLE: New Top Prices

Cattle slaughter has increased seasonally but a marked shortage of grain-fed cattle carried prices to new top figures during September. Prices of the lower grades also strengthened

in early September, after weakening in August. Larger supplies of grain-fed cattle will not be available until next winter and spring.

Meanwhile, a strong demand for stocker and feeder cattle is in prospect. The feed grain situation is much improved this year over last, relatively large profits have been obtained from cattle feeding operations during the past 6 months, and an increase in cattle feeding this fall seems certain.

Cattle marketings are expected to continue fairly large the remainder of this year, except from areas where the number of cattle has been greatly reduced by drought in recent years. But marketings will not be so large as in the fall of 1936. Practically all of the reduction in shipments this year compared with last will be in the Northern Great Plains States.

Feeding operations are expected to be on a more nearly normal basis in 1938 than in 1937. Cattle will be fed more grain and for longer periods. Fewer cows, heifers, and heifer calves will be slaughtered as farmers in drought-stricken areas will tend to hold back breeding stock and rebuild herds.

A factor in the continued good demand for slaughter cattle and beef has been the reduced slaughter supply of hogs—a situation which will not change much during the next 2 years.

HOGS: Demand Good

Discernible factors in the hog situation point to prices about as high this fall and winter as last. The slaughter supply of hogs will increase seasonally, but the total supply for fall and winter is expected to be less than that of last year. Meanwhile, the consumer demand for meats probably will continue fairly high.

Marketings of hogs will be delayed this fall as farmers feed to heavier weights, but this may result in less than the seasonal decrease in marketings in late winter and spring. The big corn crop suggests also that the pig

crop next spring will be much bigger than in the spring of 1937. The corn crop was estimated as of September 1 at 2,549,281,000 bushels—the biggest crop since 1932.

Other features of the situation include a rapid reduction recently in storage stocks of pork and lard. September 1 holdings of pork were the second smallest for that date of Government record. Stocks of lard were a little more than on September 1 a year ago, but less than average.

Prospects are for a weaker storage demand for hog products this fall and winter compared with last, when the outlook for reduced slaughter induced the accumulating of stocks against higher prices. This year the situation is reversed.

Looking beyond next spring a succession of average corn crops would doubtless result in a marked increase in hog production from present low levels, but even with plentiful feed, it is unlikely that hog slaughter will expand to predrought proportions, until 1940 or 1941.

LAMBS: Marketings Up

The usual seasonal increase in marketings of lambs is expected this fall. But more lambs will go to the Corn Belt feed lots and possibly fewer to slaughter than during the corresponding period last year. Prices are expected to hold near present figures, although feeder lambs will sell relatively higher than slaughter lambs.

Total marketings of western sheep and lambs will be fractionally less this fall than last, but most of the decrease will be in ewes. And the condition of the lambs will average somewhat better this year, since range feed has been good generally over the western sheep areas.

Last January there were fewer lambs being fed in the Corn Belt than in several years past. This January the situation will be reversed by the plentiful crops of feed. About the same number of lambs will be fed in the Western States this fall and winter.

As an offset to the probable larger marketings of fed lambs a smaller market supply of sheep and lambs will be available from sources other than feed lots.

DAIRY PRODUCTS: Good Position

Conditions in the dairy industry have worked around to the point where dairymen seem to be in the best position in several years. The big factors are the prospect for lower-priced feed and a continued good consumer demand for milk, cream, butter, and other manufactured dairy products.

More milk and cream went to market, and more dairy products were manufactured this summer than last; but 1936 was a drought year. With that exception, the production of manufactured products in July was the smallest for the month since 1932. Storage stocks of butter on September 1 were 10 percent less than the 1925-29 September 1 average.

A long period of relatively heavy milk production and increasing dairy products manufacture is in prospect. But supplies will not prove burdensome; in fact, with continued good consumer demand, prices of butter are expected to average higher in the last quarter of this year than last. During the coming feeding period—December to May—prices may average the highest in 8 years.

FATS AND OILS: Record Consumption

More than 9 billion pounds of fats and oils—a new high record—will be consumed in the United States this year, as a result of big crops of cotton, soybeans, corn, flaxseed, and peanuts. Consumption has increased steadily since 1932.

Accompanying the increased consumption have been marked shifts in production. Notable is the expansion

of the soybean industry. The output of fish oils has increased greatly since new market outlets have been developed.

POULTRY: Prices Higher

Poultry have been selling recently at highest prices since the spring of 1936; this at a time when chicken prices usually decline. But there has been less than the usual seasonal rise in the farm price of eggs.

These contrary movements are attributable to reduced marketings of poultry and to a slow out-of-storage movement of eggs. Because of the light hatch and the tendency of farmers to save laying flocks, market receipts of poultry are likely to continue small this fall and winter.

Storage stocks of eggs were the largest this summer in 7 years. The movement out of storage has been slow; unless it increases there is little likelihood that farm prices of eggs this fall and winter will top those of a year ago.

Feed will be cheaper this fall but part of this advantage may be lost in the failure of egg prices to make their usual seasonal gain. Meanwhile, egg layings continue to set new high records.

TURKEYS: Production Less

A 10-percent reduction in production of turkeys this year carries the size of the crop back to 1932 and 1933 levels. The birds were hatched earlier this year than last and will be marketed sooner, but at slightly heavier weights.

Turkey growers in practically all sections of the country report a smaller crop this year, but the biggest decrease—10 to 30 percent—is in important commercial producing areas of the West North Central and Rocky Mountain regions.

Stocks of turkeys in storage have been greatly reduced; the decks should be well cleared for the new-crop birds long before the Thanksgiving holidays.

Crop Production Near All-Time Peak

THIS year's crop production—largest since 1928—will be only 6 percent less than the all-time peak reached in the year 1920, according to latest estimates of the Crop Reporting Board of the Bureau of Agricultural Economics. But crop production per capita of the population, while exceeding that of the last 4 years, will be much less than during the 1920's.

The accompanying table and chart show the trends of production of principal crops and of total population. The index of production of principal crops is based upon the output of corn, wheat, oats, barley, rye, buckwheat, flaxseed, potatoes, sweetpotatoes, cotton, tobacco, and hay.

The index number of total production of these crops (weighted according to their relative value in 1910-14) is 110 percent of the pre-war base, compared with 78.5 percent in 1936, and with 113.5 percent in 1928. The peak of production in 1920 was 115.5 percent of pre-war.

Production of all the principal crops is substantially larger this year than last, and the production of all crops except corn, oats, barley, buckwheat,

and flaxseed is larger than the 1928-32 average. This year's corn crop is expected to equal the 5-year average, but the production of oats is estimated at 4 percent less than the average, buckwheat 13 percent less, barley 20 percent less, and flaxseed 52 percent less.

Index Number of Crop Production and Production per Capita of 12 Important Field Crops, 1920-37

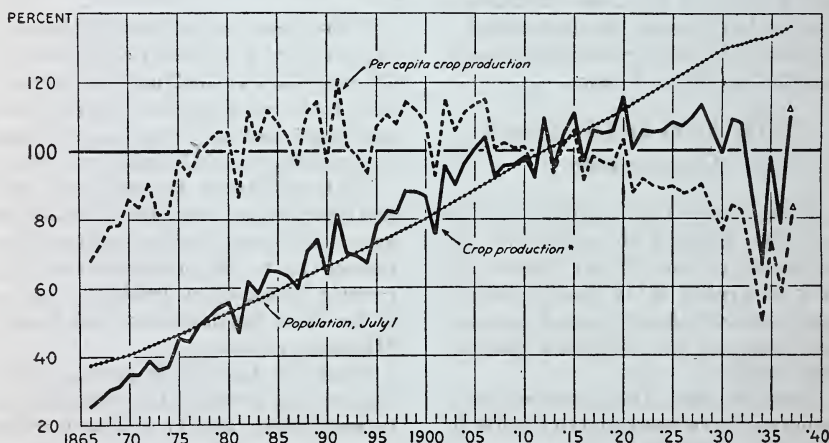
[1910-14=100]

| Year | Production of principal crops | Crop production per capita |
|-------------------------|-------------------------------|----------------------------|
| 1920..... | 115.5 | 103.0 |
| 1921..... | 100.5 | 88.0 |
| 1922..... | 105.0 | 92.0 |
| 1923..... | 105.5 | 90.0 |
| 1924..... | 106.0 | 89.0 |
| 1925..... | 108.5 | 89.5 |
| 1926..... | 107.5 | 87.5 |
| 1927..... | 110.0 | 88.5 |
| 1928..... | 113.5 | 90.0 |
| 1929..... | 107.0 | 83.5 |
| 1930..... | 99.5 | 77.0 |
| 1931..... | 109.5 | 84.0 |
| 1932..... | 108.0 | 82.5 |
| 1933..... | 89.0 | 67.5 |
| 1934..... | 66.5 | 50.0 |
| 1935..... | 98.0 | 73.5 |
| 1936..... | 78.5 | 58.0 |
| 1937 ¹ | 110.0 | 81.0 |

¹ Preliminary.

CROP PRODUCTION, POPULATION, AND PER CAPITA CROP PRODUCTION, 1866 TO DATE

INDEX NUMBERS (1910-1914=100)



* BASED UPON PRODUCTION OF CORN, WHEAT, OATS, BARLEY, RYE, FLAXSEED, BUCKWHEAT, COTTON, POTATOES, SWEETPOTATOES, TOBACCO, AND TAME HAY.
¹ PRELIMINARY

The series shows that crop production is above the average of recent years, and much higher than the average of the 1910-14 base period. Production per capita in 1937 is only 81 percent of the pre-war average, but it is 5 to 10 percent above the prevailing downward trend since 1905.

Production of most other important crops (not included in the indexes) also is much larger than the 1936 outturn, and above average. Production of apples and peaches is forecast the

largest since 1931, and much above the average for recent years. Crops of grapes and pears, and of several minor fruits and nuts, will be the largest on record. This year's production of truck crops as a group is also the largest on record.

More fruits and truck crops are being commercially canned than in several years past; the pack of some truck crops—corn and snap beans—will set a new high record.

C. M. PURVES.

World Trade Increases

AN IMPORTANT feature of the recovery in economic activity since 1932 has been the lag of world trade behind world industrial production. This is generally attributed to the increase in trade barriers during the depression. Many observers believe that complete recovery cannot take place until these barriers are relaxed or removed.

There was an abrupt rise in the quantity of world trade during the first half of 1937. Preliminary estimates show the index (adjusted for seasonal variations) standing at 100 (in percent of the 1929 level) for the second quarter of this year as compared with 87 for the last quarter of 1936. A detailed analysis shows that an important part of the increase has been due to United States imports of a wide variety of commodities, especially of such raw materials as rubber and wool.

The relation of world trade quantity to world industrial production is shown in the accompanying chart. The League of Nations index of industrial production in 22 countries, excluding the Union of Soviet Socialist Republics, has risen since 1932 at a fairly steady rate of about 12 percent annually. The corresponding rate for

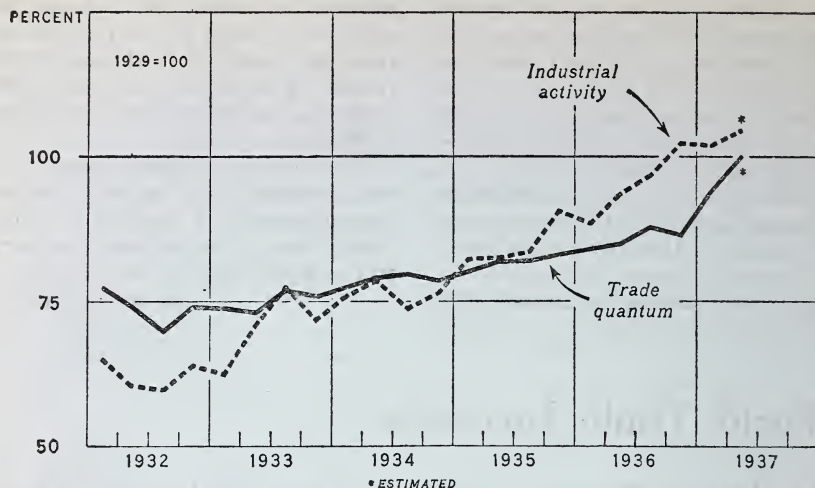
world trade until this year had been only 5 percent.

During the first half of 1937, however, the rate of rise in world trade quantity amounted to more than 30 percent. This period is too short a one to reveal a trend; but the sudden rise is especially significant because it brings the trade index within 5 percent of the production index on a 1929 basis. If the rise continues, the two indexes may be expected to be at the same level before the end of the year.

The causes of the increase in trade are unusually complex. Activity connected with rearmament has increased in a number of important countries. In other countries, large government expenditures directed toward other ends have stimulated activity and consequently the demand for internationally traded goods. In still other countries, particularly those exporting foodstuffs and raw materials, the rise in export prices has increased the national income and, consequently, imports. Finally, trade barriers have been relaxed by a number of countries.

OF THE total import increase from the first 6 months of 1936 to the first 6 months of 1937 for the 18 largest importing countries, only 39 percent

WORLD TRADE AND PRODUCTION



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was accounted for by countries (Japan, Germany, Italy, and the United Kingdom) whose current economic activity is believed to be dominated by active rearmament programs. A further 10 percent was accounted for by three countries (France, Switzerland, and Czechoslovakia) known to be rearming but also experiencing a rise in industrial activity attributable primarily to other causes. The two groups together accounted for 49 percent of the increase. The remainder was due to increased imports by countries (Canada, United States, Argentina, India, British Malaya, Belgium, Denmark, Netherlands, Sweden, Australia, and the Union of South Africa) whose economic activities are thought to be directed chiefly toward peace-time consumption. Even for the actively arming countries much of the increase was due to nonarmament activity, so

that a fair estimate of the proportion of the trade rise directly attributable to rearmament would be much lower than 49 percent.

During the past year there have been a number of reductions in import charges, and quantitative controls of imports have been relaxed in several countries. For example, most European importing countries have reduced their import barriers on grains. France and Italy reduced a number of import duties in connection with currency devaluation. More general progress toward freer international trade has been made by the Oslo powers in a recent agreement open to the adherence of other countries. Finally, the Trade Agreements Program of the United States has been making steady advances in the direction of the relaxation of trade barriers.

R. B. SCHWENGER.

A recent Bureau study has revealed a marked increase in the production of dry skim milk in the last 15 years—from about 41,000,000 pounds to more than 337,000,000 pounds. Leading producing regions are the North Atlantic, East North Central, and Western States. The product is used chiefly by bakers and ice-cream makers; the lower grades are used in poultry and animal feed.

The Lag in Farm Wages

FARM wages have lagged noticeably behind the rise in farm income and industrial wages during the last 5 years. Whereas farm income available for living increased about 200 percent during this period, farm wage rates increased less than 50 percent. Farm wage rates relative to farm prices, farm income and city wage earnings now are about 20 percent less than in the predepression years.

A study covering the last 27 years reveals striking changes in the relation of farm wages to the farmer's ability to pay and to industrial conditions. The period just before the World War was one of stable relationships; during the period of rapid change of war-time inflation and post-war deflation, farm wages were affected more by farm prices and farm income; but during the 1920's farm wages received relatively more support from the higher city wage rates and urban incomes than from farm prices and farm income.

The broad changes in farm wage rates during the past 27 years may be perceived by examining them in relation to the farmer's ability to pay and to the competition for farm labor arising from industrial conditions. The farmer's ability to pay can be represented fairly adequately, among other ways, by changes in farm prices, gross income or income after deducting certain production expenditures. Industrial competition for farm labor may be represented by city wage rates, earnings per person employed in factories or in all industrial pursuits.

Thus, for the 2 years 1919 and 1920 the average per-capita income available for living purposes to persons not on farms was about 175 percent of the 1910-14 average, the per-capita income from farm production available for living purposes per person on farms averaged about 220 percent, and farm wage rates averaged 222 percent of pre-war.

THE post-war depression brought per-capita income from farm production down to the pre-war level, the income per person not on farms down to about 160 percent of the pre-war level, and farm wage rates down to about 140 percent. By 1929, farm income had recovered to about 155 percent of pre-war, incomes of the non-farm population to about 195 percent, and farm wage rates to about 170 percent. Relative to pre-war conditions, farm wages during the years 1921-29 were higher than farm prices and farm income, due to the competitive influence of the relatively higher city wage rates and city per-capita incomes.

This relation of farm wages to the farmer's ability to pay and competition with wages and earnings in other industries continued during the years of recession 1929-32, but it has been altered noticeably since then. Per capita farm income from production in 1932 available for living purposes to all persons on farms was only 43 percent of the pre-war income, nonfarm income per capita averaged only 110 percent of pre-war, and farm wage rates continued to hold an intermediate position at 86 percent.

During the recovery period, however, farm wages appear to have lost some of the support from the relatively higher city wages and incomes, and to have been more nearly in line with the farmer's ability to pay as represented by farm prices or farm income. In 1936, income from farm production averaged 130 percent of pre-war, including benefit payments, nonfarm income averaged 148 percent, but farm wages instead of rising to a level somewhere between 130 and 148 percent, rose only to 107 percent.

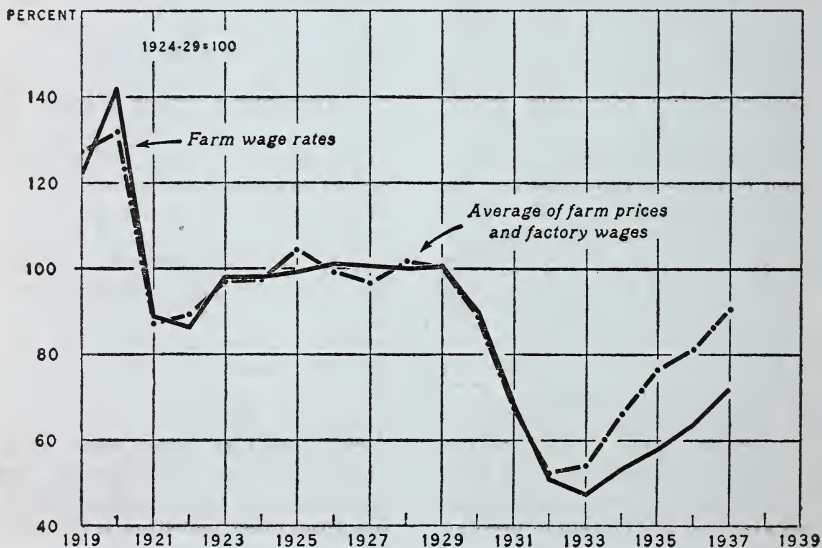
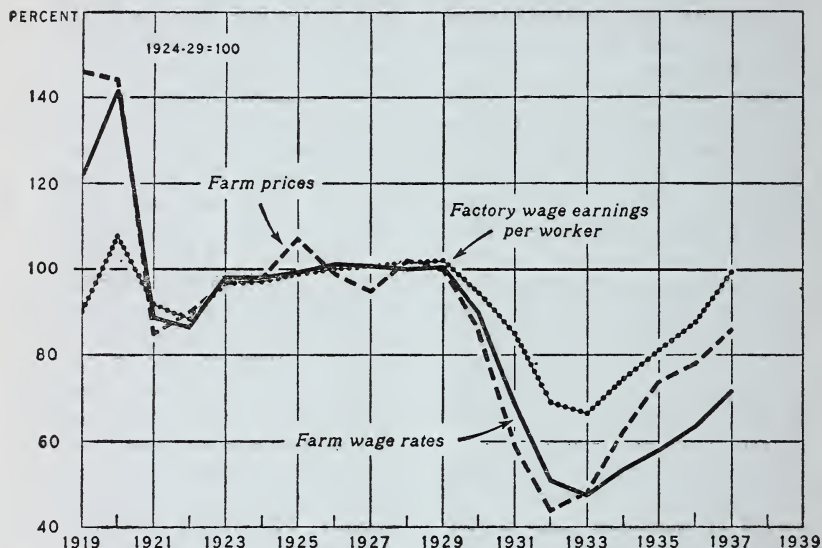
The extent to which farm wages since 1919 have responded to the farmer's ability to pay and to competition from other industries is shown in

the accompanying chart. (The farmer's ability to pay is represented by the course of farm prices annually from 1919 to 1937, farm prices being the predominant factor in the year-to-year level of either gross or net farm income. The effect of industrial conditions such as wage rates and employment on farm wages is represented by the annual average of wage earn-

ings per person employed in factories.) The data have been expressed as percentages of their 1924-29 averages.

A quantitative study of these two series in relation to farm wages reveals that the factors represented by the major changes in farm prices have had about twice the influence on farm wages as did the major factors represented by the changes in factory wage

FARM WAGES, FARM PRICES, AND FACTORY WAGES



earnings. Consequently, the index of farm prices has been given a weight of 2 and the index of factory wage earnings a weight of 1 in the combination of these two series, shown in the lower half of the chart.

HAD the close relationship that prevailed during the 1919-32 period been maintained, farm wages would have risen to higher levels after 1932. For 1937, farm wages average about 72 percent of the 1924-29 level, farm prices 86 percent, and factory wages per employee 99 percent, the weighted average of the latter being 90 percent. Farm wages, though higher than in 1933, are thus relatively 20 percent below the 1919-32 average and would have to rise about 25 percent to be in line with the pre-depression relationship.

Various offhand reasons may be ascribed to this failure of farm wages to maintain their predepression relation to farm income and prices and industrial wages. One is the relative supply of farm labor; but actually farmers have been reporting a reduction in the surplus labor supply since 1932 and a smaller supply of farm labor in 1937 than in 1929.

Another suggested reason is that the reduction in acreage has reduced the demand for farm labor; but the fact is that acreage planted and harvested for 1937 production was about the same as in 1929. The total acreage harvested in 44 crops was reduced from 360 million in 1928-32 to 287 million in 1935, but in 1936 it totaled 315 million and in 1937 was nearly equal to the 1929 figure.

Changes in crop production as well as in acreage may also be taken as a partial explanation, but the relation of crop production to the wage disparity is not a consistent one. Crop production rose 10 percent between 1930 and 1931 and declined 14 percent in 1932 without apparently causing farm wages to depart from the usual relation to farm income, farm prices, and industrial wages. Crop production declined 22 percent

between 1932 and 1934 due to drought and the Agricultural Adjustment Administration programs, but expanded 23 percent between 1934 and 1935 and was probably restored close to the predepression volume in 1937. These variations in production are not reflected in the farm wage lag or disparity which has persisted since 1932.

IT MAY be argued that the wage lag and disparity after 1932 is a regional one and that the general average of farm wages is being pulled down by the low demand and relatively lower wages in areas where acreage reduction has been persistent, particularly in the South; but this surmise does not check with the fact that farm wages in the Southern States are now closer to their 1929 levels than are farm wages in the Northeast and other States where there has been no acreage reduction.

Another possibility is that the relative importance of cash wages to wages including board and other perquisites has changed during the depression; but cash wages and wages with board show about the same relation to 1929 wages. Wages with board per day and per month in 1936 were 62 percent of those of 1929, and wages without board 63 percent, compared with 63 percent for the combination of the four farm wage rates, per month and per day, with and without board. In certain areas wages per day fell more by 1932 and have recovered less since then than have wages on a monthly basis.

Another factor that needs to be examined is the total number of persons on farms and the number available for employment. According to the Census Bureau, there were 30,169,000 persons living on farms at the end of 1929. This number gradually increased to 31,800,000 by the end of 1935 and was still 31,700,000 at the end of 1936. Thus, the farm population was about 1,500,000 larger than in 1929, with somewhere between 500,000 and 1,000,000 more persons available for farm work than in 1929.

NO adequate explanation of the farm-wage discrepancy is at present possible without a more detailed analysis of the factors referred to above.¹ The direct and indirect data as to the farm labor supply and actual employment on farms are too meager, and the more accurate data as to acreage and production do not offer an adequate or consistent explanation. Since the lag continues in spite of the restoration of both acreage and production in 1937 close to the predepression levels, it is necessary to

seek additional reasons and to make further analyses.

L. H. BEAN.

¹ For a different conclusion as to the existence of a disparity, see *Agricultural Wage Relationships*, a study by Dr. J. D. Black in the *Review of Economic Statistics*. After examining data as to farm income, farm prices, supply of farm labor, land values, rents, etc., he concludes, "We have observed evidence of lags and of irregularities in the data; but no serious abnormalities. The failure of farm wage rates to rise above net farm incomes and prices received by farmers in 1934 and 1935 seems reasonably consistent with the rest of the pattern in particular with factory employment, farm labor supply, and migration from farms to cities" (p. 10).

Farm Laborers: Their Economic and Social Status

AGRICULTURE employs more than 2,500,000 persons as hired farm laborers. These are men and women of varying economic and social status. Many are itinerants who follow the crops north, south, east, or west in response to the seasonal demand for workers. Many find a few weeks' work, then move on to the next job. Few find steady employment. The pay is usually small; it may be as little as 50 cents a day; sometimes it is less.

During the summer and fall of 1936 the Works Progress Administration made funds available to the Bureau of Agricultural Economics for studies of farm-labor conditions in 11 counties in as many States. Investigators went into the heart of the Corn Belt, the Wheat Belt, the cattle and sheep country; into the tobacco, cotton, fruit, and dairy regions. They went into areas where farm labor is employed the year round and into areas where hired hands are needed for only a short time during the harvest season.

They found laborers of all races and abilities; young men and old, and some women. Some had hope of

eventually becoming farm owners, but many were stalled on the lowest rung of the agricultural ladder. In six northern counties 50 to 75 percent of the laborers were under 30 years of age; elsewhere, older men predominated. In some areas men of 60 years or more were working in the fields and orchards. A third of all the men were 40 years of age and over; for them the chance of becoming owners is slight. Mexicans and orientals were older, on the average, than white farm laborers.

Sharp sectional differences were found in educational attainment of the laborers, ranging from no education to completion of the elementary grades. On the whole, northern laborers had more education than laborers in other sections, and white laborers more than other races. Between 2 and 15 percent of the northern farm laborers had not gone beyond the fourth grade; but in the South 37 percent of white laborers in one county and 95 percent of Mexicans in another county reported no more than this meager educational attainment. More than a third of the Mexicans had had no schooling, and a large propor-

tion of these were American born. A negligible percentage of southern workers had more than elementary education, but 25 percent or more of the northern workers had completed at least 1 year of high-school work.

ANNUAL earnings varied greatly in each county, but more so as between counties. The average reported ranged from \$62 among female Negro cotton pickers and \$178 among male Negro cotton pickers in Louisiana, and \$125 among white male workers in a Tennessee county, to \$347 among the white laborers in Pennsylvania, and \$748 among the orientals in Placer County, Calif. The average earnings of the southern workers interviewed were only slightly more than half the earnings of the northern workers.

Some persons with farm tenure ranging from croppers to owners work away from their farms. Thus, in one southern county, one-third of those interviewed as hired laborers were working as such to supplement their incomes as croppers.

In many cases, other members of the laborer's family contributed to these incomes. The oriental workers in the California sample reported the largest average incomes, but the amount available per family member among them was only \$163 per year. In no southern county was as much as \$100 available per person annually, but the northern workers reported an average of at least \$125 per person. The highest average per person was among the cattle and sheep hands in Colorado—\$238 a year.

Danubian Governments will employ wheat-relief systems this season with minor changes from the plans of last year. In Bulgaria, the grain monopoly will buy wheat from farmers at 86 cents a bushel, and rye at 62. The monopoly commission fee is 1 percent. Any profits made will be prorated among the growers.

In most areas a negligible proportion of the workers had any income from nonagricultural work. But those who lived on the farms where they worked generally received some perquisites in addition to wages by way of board, lodging, food, and house rent.

The investigators found that the farm laborers took only a limited part in the organized activities of their communities. The workers belonged to few formal organizations, unions or farmer groups, and made most of their social contacts informally. They went to town several times a month to shop, attend religious services, or go to the movies. The proportion who attended church was less, and the movies more, in the northern than in the southern counties. Forty percent or more of the workers in nearly every county surveyed said they made overnight or longer visits to friends or relatives, ranging from visits twice a year on the part of the orientals in California to nearly every week on the part of the Mexicans in Texas.

The 11 counties surveyed were: Placer County, Calif.; Archuleta County, Colo.; Livingston County, Ill.; Hamilton County, Iowa; Pawnee County, Kans.; Todd County, Ky.; Concordia Parish, La.; Lac qui Parle County, Minn.; Wayne County, Pa.; Fentress County, Tenn.; Karnes County, Tex.

Separate reports for each county will be issued this fall by the Bureau of Agricultural Economics.

TOM VASEY and JOSIAH C. FOLSOM.

In Hungary, producers will continue to share the general agricultural relief funds collected from special taxes levied for agricultural relief; in Rumania, wheat will be bought by the Government should it be considered necessary to stabilize prices; in Yugoslavia, the Privileged Export Co. will buy wheat at prices to be fixed from time to time by the Government.

Spanish War Hurts Cotton, Tobacco Trade

THE civil war in Spain has had important repercussions on the agricultural trade between the United States and that country. Since the beginning of the conflict, Spain has imported practically no American cotton and no dark fire-cured tobacco—commodities which have always represented the bulk of our agricultural exports to Spain. But United States imports of Spanish agricultural specialties have continued in about normal quantities.

In past years, Spain has been an important market for American cotton, taking an average of almost 300,000 bales during the 6 years preceding the 1936-37 season, or about 4 percent of our total cotton exports. In the first few weeks of the civil war, the cotton mills of Barcelona, which comprise practically the entire Spanish cotton textile industry, were closed. Some reports indicate that work has been resumed in these mills, but no statistics are available showing the quantities of cotton which may have been used. Official Spanish import statistics since the beginning of the civil war are not available but, so far as can be ascertained, none of the principal cotton-exporting countries outside of the United States have made any exports of raw cotton to Spain. It seems safe to assume, therefore, that for the past year Spain has ceased to import raw cotton from any source.

The loss of the Spanish market is a serious blow to the American dark fire-cured tobacco industry. The exports of this type of tobacco have fallen off drastically in recent years and at the time of the outbreak of the war Spain was the second largest foreign purchaser—second only to France—of this type of tobacco. Although exports of dark fire-cured tobacco to Spain have been very irregular, they averaged almost 9,000,000 pounds a year, or approximately

13.5 percent of the total to all countries for the 6-year period, 1930-31 to 1935-36. Spain probably has not increased its imports of leaf tobacco from other sources; but Spanish production may have been increased.

UNITED STATES imports of Spanish agricultural products since the outbreak of the civil war in Spain have been fairly well maintained. These imports are made up mainly of seven products: Olive oil, olives in brine, wines, shelled almonds, paprika, shelled filberts, and pimientos. It is significant that during the 6-month period, January to June 1937, American imports of these Spanish agricultural commodities were much smaller, in quantity, than during the same period in 1936. But, during the same period, the value of these agricultural imports was not much less than during January to June 1936.

The subjoined tables detail the United States exports of raw cotton and dark fire-cured tobacco to Spain for the years 1930-31 to 1935-36.

Cotton

| Year ended July 31 | Total exports | Exports to Spain | Percent Spain is of total |
|---------------------|--------------------|--------------------|---------------------------|
| | <i>1,000 bales</i> | <i>1,000 bales</i> | <i>Percent</i> |
| 1930-31..... | 7,029 | 272 | 3.9 |
| 1931-32..... | 9,081 | 335 | 3.7 |
| 1932-33..... | 8,766 | 340 | 3.9 |
| 1933-34..... | 7,815 | 300 | 3.8 |
| 1934-35..... | 4,925 | 262 | 5.3 |
| 1935-36..... | 6,105 | 223 | 3.7 |
| 6-year average..... | 7,287 | 289 | 4.0 |

Dark Fire-Cured Tobacco

| Year ended Sept. 30 | Total exports | Exports to Spain | Percent Spain is of total |
|---------------------|---------------------|---------------------|---------------------------|
| | <i>1,000 pounds</i> | <i>1,000 pounds</i> | <i>Percent</i> |
| 1930-31..... | 74,136 | 2,011 | 2.7 |
| 1931-32..... | 82,457 | 9,945 | 12.0 |
| 1932-33..... | 70,844 | 15,854 | 22.4 |
| 1933-34..... | 63,036 | 5,416 | 8.6 |
| 1934-35..... | 60,265 | 12,222 | 20.3 |
| 1935-36..... | 52,866 | 7,844 | 14.8 |
| 6-year average..... | 67,267 | 8,882 | 13.5 |

N. W. HAZEN.

Reorganization of Local Government in the Great Plains Area

(No. 3 in a series)

IN MOST of the States comprising the Great Plains area, the county is gradually assuming all the functions usually assigned to smaller subdivisions of governments, including those of the township. Usually, one important exception remains—school services continue to be supplied by the many small districts that are organized within the county limits.

This traditional form of governmental organization became established as this territory was settled and carved into States following the adoption of the Homestead Act. It was a suitable form for a country where intensive settlement was actively encouraged by every interested agency, both public and private, and where the basic economy rapidly became an intensive and undiversified agriculture.

As this phase of the history of the Great Plains developed into the land boom of the years before 1920, governmental services expanded rapidly, with little change in the traditional form of organization.

Today, the economic and social conditions characteristic of these earlier times no longer prevail. During the period of recent prolonged droughts significant decreases in rural population have occurred, and the pattern of settlement has become more scattered. As a result the per-capita costs of government have greatly increased. At the same time much of the land under intensive cultivation has become economically less productive, and shifts to extensive types of agriculture are beginning to take place. While the exploitation of minerals and the building of towns, cities, railroads, and other utilities have in turn added much wealth to the country, nevertheless there is a significant variation in the per-capita wealth as it exists in

one governmental unit as compared to another, especially as among the small school districts. Furthermore, for a time at least, there will be a tendency for improved land-use practices to emphasize these variations in wealth, population, and settlement pattern.

These changes, unaccompanied by coordinate changes in governmental structure, have had significant effects upon the financing of local units of government, especially because of the fact that the principal source of revenue to these governments is the property tax.

IN SOME areas a large number of the small school districts continue to operate with enrollments reduced to a point where efficient operation is no longer possible. Out of 38 districts in one Montana county (most of them operating one-room schools) 28 have experienced declining enrollments of up to 83 percent in the period from 1920 to 1935. The operating costs for all one-room schools in the county for the year ending June 30, 1935, ranged from \$32.55 per enrolled pupil (in a school where the enrollment was 24 pupils) to \$233.60 per pupil (where the enrollment was only 3 pupils).

From the standpoint of operating costs most of these districts were probably efficient units at the time of their organization. Now, the drastic effects of drought and the consequent changes in land-use practices are bringing about shifts in population which make the maintenance of these governments a severe drain on the resources of the area.

In addition to being inefficient from the point of view of costs of operation, some of these districts, organized as they are, no longer provide services of a quality that citizens of a democracy should rightly receive.

The difficulty in equalizing the educational opportunities for all chil-

dren in the county is demonstrated by the fact that the taxable valuation per classroom in the year 1934-35 ranged from \$17,228 to \$170,053. Thus, while it is not difficult for certain districts to supply an ordinary standard of school services to its residents, a neighboring district may find it impossible to do so because of limitations of its tax base imposed by economic changes that have taken place within its borders.

The situation in the county for which the above data are cited is similar to that which exists in many other sections of the Great Plains. In many cases, to attempt to carry on with the established organization necessitates either a reduction in the quality and extent of the services now supplied, or the need for the absorption of increasing portions of the farm income or even of farm capital for the support of ordinary public services.

Resistance to the latter is evident in continued and extensive tax delinquency. Since there is a firm trend toward an expansion and improvement of governmental services, the situation would seem to demand a reorganization of local units of government that will fit the changing economic and social conditions of the Great Plains.

SOME of the aims of a plan for governmental reorganization should include: (1) the equalization of educational opportunities, (2) improvement in the standard of public services, (3) enlargement of the territory comprising the local taxing unit in order that existing concentrations of taxable wealth shall be included in the tax base of areas wide enough to benefit larger groups of people, (4) the allocation to the State of functions other than those of immediate local concern, (5) an

appraisal and subsequent revision of the State tax system and of the system of State grants-in-aid in order (a) that all resources of the State, including those not taxable by local units, may contribute to the support of essential services in accordance with the ability-to-pay principle, and (b) that grants-in-aid are not distributed in such a manner as to perpetuate uneconomic forms of local government, and (6) correlation of plans for reorganization of governmental units with those for better land use.

The aim of reorganization of local governments in the Great Plains, as in other rural areas, should be to help achieve the larger objective of an improvement in the social and economic status of the farmer. Fundamentally, the means of achieving this end is land-use adjustment. Such adjustment in the Great Plains area largely consists of a shift to farms of larger acreage and the devotion of certain areas entirely to grazing, which in turn may mean a dispersed pattern of settlement.

It is well to note in this connection that even after logical reorganization of government, it may be difficult to reduce the per capita costs of public services, if improvements in land use result in a sparser pattern of settlement. In any specific case the problem becomes one of weighing alternatives in order to make the better choice. An incidental and compensating advantage to local governmental units in the Great Plains in their aim to provide services of a desirable standard even through drought periods, is brought about by land-use adjustments which involve a shift to extensive farming and thereby enable the farmer to stabilize his operations and income.

HUGO C. SCHWARTZ.

New Jersey was officially designated by the United States Department of Agriculture on September 1, and New York on October 1, as modified accredited States where bovine tuberculosis has been reduced to less than one-half of 1 percent as shown by the tuberculin test and the removal of "reactors." The only nonaccredited States now are California and South Dakota.

Quality of the Cotton Carry-Over

CONTRARY to beliefs widely held, the cotton carry-over of the past 10 years did not include large quantities of "unspinnable" cotton; it did not include excessively large quantities of untenderable cotton. This is shown by an analysis of the annual reports of the Bureau of Agricultural Economics covering the quality of cotton on hand in the United States as of August 1, each year dating back to 1928. The cotton quality reports are based upon the classification of samples representing cotton in storage.

Although the assembling and dissemination of comprehensive information on the quality of the cotton carry-over was not started until 1928, efforts had been made before then to make available certain information on the quality of stocks of cotton in the United States on specified dates. The War Industries Board in 1918, assisted by the then Bureau of Markets, made an inquiry concerning the grade of cotton stocks, and in 1920 the United States Senate (S. Res. 340, Mar. 24, 1920, 66th Cong., 2d sess.) directed that the Director of the Census furnish to it, the Senate, information on the number of bales of so-called "unspinnable" cotton, including gin cut, water packed, perished fiber, and linters, in public storage and at concentration points.

These and other efforts to assemble information on the quality of cotton stocks were followed by the enactment of legislation (act of Mar. 3, 1927, 44 Stat. 1372-1374) specifically providing for the assembling and dissemination of information on the grade, staple, and tenderability of cotton on hand in the United States on August 1 of each year.

THE carry-over of American upland cotton in the United States during the past decade has ranged from a little over 2,000,000 bales to around 9,500,000 bales, ranging from

13 to 42 percent of the supply of which it was a residue. Since 1928 there has been a marked increase in the proportion of upland cotton shorter than an inch in staple in the carry-over, and a corresponding decrease in the proportion that was 1 inch and longer in staple. On the average, 6 percent of the 10 carry-overs of upland cotton of the period 1928-37 was shorter than $\frac{7}{8}$ inch in staple; 35 percent was $\frac{7}{8}$ inch; 25 percent, $1\frac{1}{16}$ inch; 17 percent, 1 inch; 8 percent, $1\frac{1}{8}$ inches; 6 percent, $1\frac{1}{2}$ inches; and 3 percent, $1\frac{3}{4}$ inches and longer.

The average staple length of the annual carry-over of upland cotton during most of the 9-year period 1929-37 was longer than the average staple length of upland cotton ginned from the preceding crop. Upland cotton carried over in consuming establishments has averaged longer in staple than the aggregate of that carried over in public warehouses and other places of storage.

About 64 percent of the upland cotton in the 9 carry-overs of 1928-36 was Extra White and White Middling and above in grade. Spotted cotton constituted only about 13 percent of those carry-overs, and most of the spotted cotton was Middling and above in grade. The 1937 carry-over was classed on the revised grade standards that became effective August 20, 1936, whereas the carry-overs of 1928-36 were classed as standards effective prior to August 20, 1936. About 50 percent of the 1937 carry-over of American upland cotton was Extra White and White Middling and above in grade.

Less than 1 percent of the upland cotton in the carry-overs of 1928-37 was lower in grade than the lowest of the established grades, and only about 12 percent was untenderable. About one-half of the untenderable cotton was shorter than $\frac{7}{8}$ inch in staple.

W. B. LANHAM and F. H. HARPER.

Growth of the Vegetable Industry

THE vegetable industry—commonly regarded as a minor agricultural enterprise—has become a major source of gross income to farmers. During the 3 years, 1933-35, it yielded a gross farm income averaging nearly three-fourths of a billion dollars a year. This was about 23 percent of the total gross income from all crops and slightly more than 10 percent of the total income from crops and livestock combined.

The gross income from vegetable production during 1933-35 exceeded that from cotton and cottonseed by nearly 4 percent; grains, 15 percent; fruits and nuts, 58 percent; tobacco, 238 percent; sugar crops, 900 percent; and all other crops combined, by 105 percent. It exceeded slightly the gross income derived from the major classes of livestock except dairy products.

A new high in vegetable crop acreage was probably reached this year, and yet the entire area—about 10,500,000 acres—is only about 3 percent of all the land planted to crops. Vegetables are produced in every State, but in the main the industry is concentrated in certain well-defined areas along the Atlantic seaboard, in the Gulf States, the Pacific Coast States, and certain areas in the North Central States.

The acreage in vegetable production has increased sharply in recent years, reaching a record high total of 10,000,000 to 10,500,000 acres in 1935, an increase of about 25 percent since 1925. Acreage was reduced in 1936 on account of the drought and low prices but it was expanded again this year.

The acreage of potatoes, the leading vegetable crop, has varied widely, with the general level increasing slightly during the last decade. The general level for the past 10 years, however, was much below that in the decade previous to 1925, when potato

plantings were stimulated by war demand. In 1936 there was a sharp reduction in the harvested acreage, because of smaller plantings and the abandonment occasioned by drought. The 1937 planted acreage is about 5.4 percent larger than the relatively small acreage harvested in 1936.

THE acreage of sweetpotatoes was increased sharply during the early 1930's, rising from 636,000 acres in 1928 to 1,056,000 acres in 1932; but the total this year is about 826,000 acres. The area planted to sweetpotatoes is influenced chiefly by the price of cotton, contracting when cotton is relatively high and expanding when cotton production becomes unprofitable and there is necessity for a live-at-home program. In some areas, however, such as the central Atlantic Coast States, Kentucky, Tennessee, and a few North Central States, a large acreage is grown for commercial market.

The harvested acreage of dry edible beans more than doubled in the 10 years ending in 1930, rising from 861,000 acres in 1921 to 2,159,000 acres in 1930. But by 1932 acreage was reduced to 1,431,000 acres and plantings have varied between that figure and 1,885,000 acres during the past 5 years. In 1937 the planted area is estimated at 1,794,000 acres, or about 15 percent more than was harvested in 1936.

The acreage of truck crops for market and for canning increased by 50 percent during the 10 years ending 1935, when a record high total of 3,060,000 acres was harvested. But most of the increase was in truck crops for market, since the area for canning increased by only about 250,000 acres—from 1,204,000 in 1925 to 1,457,000 acres in 1935.

The acreage of canning vegetables tends to follow a 5-year cycle—3 years of expansion in acreage, during which supplies are built up to a point

where they exceed market requirements, followed by 2 years of rather pronounced decreases in acreage. The cycle shows peak acreages in 1925, 1930, and 1935, and low points in 1927 and 1932. There was much abandonment of canning vegetable acreage in 1936, because of drought, but for 1937 it appears that a new high record of approximately 1,580,000 acres was planted.

The acreage of truck crops for market increased steadily from 966,000 acres in 1925 to 1,604,000 in 1935. It was increased again in 1936 to a new high of 1,661,000 acres, and the prospect is for a further slight expansion this year. But there have been sharp annual fluctuations in the acreage of the individual truck crops. In a given year, some crops were expanded

sharply, others were reduced; some crops were expanded faster than others, as the demand for them increased at a faster rate.

THE production of truck crops for market has followed much the same trend as acreage, except that the upswing has not been quite so great since yields per acre have declined about 15 percent during the last decade. A record volume of these crops combined was produced in 1936; the prospect is for a further increase in 1937. Production of canning crops also has followed the trend of acreage, reaching cyclical peaks in 1925, 1930, and 1935. There was a decrease of about 2 percent in 1936, but this year a new record high production is in prospect.

GUSTAVE BURMEISTER.

Grape Prospects Best in Seven Years

NINETEEN thirty-seven promises to be the best year for grape growers since 1930. The total crop is indicated to be very near the record crops of 1927 and 1928. Demand is good and prices are likely to be high enough to bring growers a larger gross cash income than they have received in the past 6 years.

In California, where 85 to 90 percent of the total crop is grown, production is indicated at 2,262,000 tons, the largest crop in 9 years. In view of the existing conditions of demand, supply, and prices, it seems likely that about 1,000,000 tons of California grapes will be dried for raisins this season; about 325,000 tons are likely to be used fresh for eating out of hand, and about 200,000 tons probably will be used in private homes largely for making home-made wine. This would leave more than 700,000 tons available to wineries for the production of commercial wine and brandy.

In the other grape-producing regions the crop this year is indicated at more than 312,000 tons, which is half again as large as last year's crop and some-

what above average. Grape prospects are much better than last year but below average in New York, Pennsylvania, and Michigan; indications point to a very large crop in Ohio and to above average crops in Missouri and Arkansas.

Available statistics indicate, that in the last few years about 10 percent of the Eastern grape crop has been used by commercial concerns for making wine, and about the same quantity for unfermented grape juice. Allowing for small quantities used by commercial preserving companies, it appears that about three-fourths of the Eastern grape crop is ordinarily used fresh in private homes.

During the past 10 years an average of about 45 percent of the California grapes has been used each year in the production of raisins. The quantities going to this use have ranged from 640,000 tons from the very small crop of 1931 to 1,104,000 tons from the record crop of 1927. During the same period the quantity of grapes eaten fresh has been about 16 percent of the harvested production or about 290,000 tons.

CONSUMER buying of fresh grapes fell off sharply during the depression; in 1933, only 201,000 tons or 12 percent of the crop were used as fresh table stock, whereas in 1936, with approximately the same harvested production, and with improved demand conditions, the consumption was 290,000 tons or 17 percent of the total.

Following adoption of the prohibition amendment in 1919 there was a strong demand in Eastern cities for fresh grapes for use in home wine-making. Prices of California grapes rose rapidly and reached heights that resulted in a rapid expansion of grape acreage. As production increased prices declined, but large quantities of grapes continued to be used for home-made wine throughout the prohibition period. During the 6 years, 1927 to 1932, an average of slightly less than one-third of each year's harvested production in California, or about 587,000 tons, was used for this purpose.

Legalization of commercial wine and brandy in 1933 caused a sharp drop in home wine-making, and a sharp decline in sales of fresh juice grapes in Eastern markets. In the 4 years, 1933 to 1936, the average quantity of grapes so used was only 230,000 tons, or an average of about 12 percent of each year's harvested production. This decline has been a little more than offset by a sharp increase in the use of grapes by commercial wineries, and the use of grapes for all juice purposes has averaged somewhat higher since 1933 than in the latter part of the prohibition period. During the 4 years from 1933 to 1936 an average of 819,000 tons of grapes were used in commercial wineries and in private homes for making wine and brandy, whereas during the years 1927 to 1932 (omitting 1931 when the crop was extremely small) the average utilization for this purpose was only 700,000 tons.

GORDON E. OCKEY.

Rural Industries in Scandinavia

RURAL home industries have been extensively developed as a source of supplementary farm income in several of the less fertile sections of Sweden and Norway. The persistence of home industry in these regions is suggestive of our Southern Appalachian country; but the small (and large) factories along some of the rivers remind one of New England.

The principal center of year-round rural home industry in Sweden is the district around Borås, a progressive and prosperous textile manufacturing city of 50,000 people. The knitting mills in the city have placed hand-operated knitting machines in about 10,000 farm homes in the surrounding hilly countryside, an area characterized by poor soils and thrifty, hard-working people.

The knitting is done mostly by the wives and daughters on small farms,

Dr. O. E. Baker of the Bureau of Agricultural Economics recently returned to the United States from the International Population Congress in Paris, which he attended as the official delegate of the Population Association of America. Following the Congress, Dr. Baker and a small group of economists and sociologists toured rural Scandinavia. His observations of rural home industries are here briefly cited.

most of which are owned by the operators. The work is paid for by the piece, the wage averaging 75 cents to \$1 a day of 8 to 10 hours. But when two or three daughters and their mother are so employed, the supplementary income usually exceeds the cash receipts from the farm. Indeed, many of these farms provide little more

than food for the family. Most of the families visited had 3 to 6 children, whereas in Stockholm the average is only 2.

The farms provide economic security, and the home industries the income needed to enjoy something of modern comfort. The houses generally are larger and better built than many in our own Corn Belt; all are well painted and practically all have electricity. Besides manufacturing knitted goods, the women sew together the parts of ready-made dresses, and some farmers make furniture, packing boxes, and baskets during the long winters when there is little farm work. The pay is little, compared with American urban wages, but it is a welcome addition to the meager farm returns.

NOT FAR from Borås is the village of Anderstorp, with perhaps 2,000 people widely scattered over a hilly, sandy terrain. Here are 65 small factories, many in the back yards of the homes of the proprietors. They make screws, curtain rods, wire lath, shoe eyelets, and other small novelties. The small ones employ only members of the family; the largest ones, perhaps 50 men. The machinery varies from the crudest to the most modern.

The workers in Anderstorp live in 6-room or larger houses; many have a garden, fruit trees, chickens, and a cow. Many of the women with whom we talked had been to Stockholm. They said they preferred the village life and the yards where children can play. The factory proprietors said they were able easily to undersell urban competitors.

In Oslo, Norway, we visited the large store which is operated by the cooperative association organized to market the products of home industry in Norway. Here the variety of goods is very wide, including splendid furniture, beautiful rugs, wooden ware of all sorts, linens, and cotton goods. We were told that the principal buyers are the people of Oslo, and that the objective is to compete in price with factory-made goods of equal quality. This store maintains a school for weavers and dyers, as well as a staff of itinerant instructors, and provides much of the raw material needed. The obvious efficiency and success of this promotional and marketing organization deserves study by persons interested in promoting home industry in the United States.

O. E. BAKER.

Measures of Domestic Demand

[1924-29=100]

| | August | | | | Percent change | | |
|--|--------|-------|-------|-------|----------------|---------|---------|
| | 1929 | 1933 | 1936 | 1937 | 1936-37 | 1933-37 | 1929-37 |
| National income..... | 108.8 | 63.3 | 88.0 | 99.0 | +13 | +56 | -9 |
| Nonagricultural income: | | | | | | | |
| Total..... | 109.3 | 63.9 | 87.4 | 98.4 | +13 | +54 | -10 |
| Per capita..... | 103.6 | 59.0 | 78.4 | 87.5 | +12 | +48 | -16 |
| Factory pay rolls: | | | | | | | |
| Total..... | 109.9 | 56.6 | 81.9 | 101.8 | +24 | +80 | -7 |
| Per employed wage earner..... | 102.6 | 71.2 | 87.6 | 99.6 | +14 | +40 | -3 |
| Industrial production: | | | | | | | |
| Total..... | 113.3 | 85.2 | 101.1 | 109.5 | +8 | +29 | -3 |
| Factories processing farm products..... | 107.9 | 105.4 | 107.1 | 103.9 | -3 | -1 | -4 |
| Other factory production..... | 116.9 | 74.9 | 99.7 | 114.0 | +14 | +52 | -2 |
| Construction activity: | | | | | | | |
| Contracts awarded, total..... | 100.8 | 19.8 | 51.2 | 56.2 | +10 | +184 | -44 |
| Contracts awarded, residential..... | 77.0 | 11.6 | 41.2 | 36.7 | -11 | +216 | -52 |
| Employment in production of building materials..... | 94.9 | 43.9 | 58.4 | 62.0 | +6 | +41 | -35 |
| Cost of living: | | | | | | | |
| Food..... | 104.1 | 69.3 | 80.9 | 82.4 | +2 | +19 | -21 |
| "All other items"..... | 98.0 | 82.2 | 82.3 | 84.7 | +3 | +3 | -14 |
| Purchasing power of nonagricultural income per capita: | | | | | | | |
| For food..... | 99.5 | 85.1 | 96.9 | 106.2 | +10 | +25 | +7 |
| For "All other items"..... | 105.7 | 71.8 | 95.3 | 103.3 | +8 | +44 | -2 |

NOTE.—All indexes adjusted for seasonal variation except "Cost of living."

General Trend of Prices and Wages

[1910-14=100]

| Year and month | Whole-sale prices of all commodities ¹ | Industrial wages ² | Prices paid by farmers for commodities used in ³ — | | | Farm wages | Taxes ⁴ |
|----------------|---|-------------------------------|---|------------|-----------------------|------------|--------------------|
| | | | Living | Production | Living and production | | |
| 1920..... | 225 | 222 | 222 | 174 | 201 | 239 | 209 |
| 1921..... | 142 | 203 | 161 | 141 | 152 | 150 | 223 |
| 1922..... | 141 | 197 | 156 | 139 | 149 | 146 | 224 |
| 1923..... | 147 | 214 | 160 | 141 | 152 | 166 | 228 |
| 1924..... | 143 | 218 | 159 | 143 | 152 | 166 | 228 |
| 1925..... | 151 | 223 | 164 | 147 | 157 | 168 | 232 |
| 1926..... | 146 | 229 | 162 | 146 | 155 | 171 | 232 |
| 1927..... | 139 | 231 | 159 | 145 | 153 | 170 | 238 |
| 1928..... | 141 | 232 | 160 | 148 | 155 | 169 | 239 |
| 1929..... | 139 | 236 | 158 | 147 | 153 | 170 | 241 |
| 1930..... | 126 | 126 | 148 | 140 | 145 | 152 | 238 |
| 1931..... | 107 | 207 | 126 | 122 | 124 | 116 | 217 |
| 1932..... | 95 | 178 | 108 | 107 | 107 | 86 | 188 |
| 1933..... | 96 | 171 | 109 | 108 | 109 | 80 | 161 |
| 1934..... | 109 | 182 | 122 | 125 | 123 | 90 | 153 |
| 1935..... | 117 | 191 | 124 | 126 | 125 | 98 | 154 |
| 1936..... | 118 | 199 | 122 | 126 | 124 | 107 | ----- |
| 1936 | | | | | | | |
| September..... | 119 | 198 | 123 | 132 | 127 | ----- | ----- |
| October..... | 119 | 202 | ----- | ----- | 127 | 110 | ----- |
| November..... | 120 | 201 | ----- | ----- | 127 | ----- | ----- |
| December..... | 123 | 211 | 124 | 133 | 128 | ----- | ----- |
| 1937 | | | | | | | |
| January..... | 125 | 209 | ----- | ----- | 130 | 103 | ----- |
| February..... | 126 | 211 | ----- | ----- | 132 | ----- | ----- |
| March..... | 128 | 218 | 127 | 139 | 132 | ----- | ----- |
| April..... | 128 | 219 | ----- | ----- | 134 | 112 | ----- |
| May..... | 128 | 219 | ----- | ----- | 134 | ----- | ----- |
| June..... | 127 | 220 | 129 | 141 | 134 | ----- | ----- |
| July..... | 128 | 218 | ----- | ----- | 133 | 123 | ----- |
| August..... | 128 | 220 | ----- | ----- | 132 | ----- | ----- |

| Year and month | Index numbers of farm prices [August 1909-July 1914=100] | | | | | | | | Ratio of prices received to prices paid |
|----------------|--|-----------------------|--------|-------------|--------------|----------------|-------------------|------------|---|
| | Grains | Cotton and cottonseed | Fruits | Truck crops | Meat animals | Dairy products | Chickens and eggs | All groups | |
| 1920..... | 232 | 248 | 191 | ----- | 174 | 198 | 223 | 211 | 105 |
| 1921..... | 112 | 101 | 157 | ----- | 109 | 156 | 162 | 125 | 82 |
| 1922..... | 106 | 156 | 174 | ----- | 114 | 143 | 141 | 132 | 89 |
| 1923..... | 113 | 216 | 137 | ----- | 107 | 159 | 146 | 142 | 93 |
| 1924..... | 129 | 212 | 125 | 150 | 110 | 149 | 149 | 143 | 94 |
| 1925..... | 157 | 177 | 172 | 153 | 140 | 153 | 163 | 156 | 99 |
| 1926..... | 131 | 122 | 138 | 143 | 147 | 152 | 159 | 145 | 94 |
| 1927..... | 128 | 128 | 144 | 121 | 140 | 155 | 144 | 139 | 91 |
| 1928..... | 130 | 152 | 176 | 159 | 151 | 158 | 153 | 149 | 96 |
| 1929..... | 120 | 144 | 141 | 149 | 156 | 157 | 162 | 146 | 95 |
| 1930..... | 100 | 102 | 162 | 140 | 133 | 137 | 129 | 126 | 87 |
| 1931..... | 63 | 63 | 98 | 117 | 92 | 108 | 100 | 87 | 70 |
| 1932..... | 44 | 47 | 82 | 102 | 63 | 83 | 82 | 65 | 61 |
| 1933..... | 62 | 64 | 74 | 105 | 60 | 82 | 75 | 70 | 64 |
| 1934..... | 93 | 99 | 100 | 104 | 68 | 95 | 89 | 90 | 73 |
| 1935..... | 103 | 101 | 91 | 127 | 118 | 108 | 117 | 108 | 86 |
| 1936..... | 108 | 100 | 100 | 113 | 121 | 119 | 115 | 114 | 92 |
| 1936 | | | | | | | | | |
| October..... | 128 | 104 | 104 | 131 | 120 | 125 | 127 | 121 | 95 |
| November..... | 127 | 103 | 97 | 104 | 118 | 126 | 141 | 120 | 94 |
| December..... | 134 | 105 | 93 | 99 | 122 | 127 | 133 | 126 | 98 |
| 1937 | | | | | | | | | |
| January..... | 143 | 107 | 105 | 115 | 128 | 128 | 110 | 131 | 101 |
| February..... | 146 | 108 | 127 | 143 | 126 | 126 | 101 | 127 | 96 |
| March..... | 145 | 116 | 133 | 131 | 129 | 125 | 102 | 128 | 97 |
| April..... | 154 | 117 | 142 | 127 | 130 | 120 | 104 | 130 | 97 |
| May..... | 149 | 112 | 152 | 139 | 133 | 116 | 96 | 128 | 96 |
| June..... | 139 | 107 | 157 | 124 | 137 | 113 | 95 | 124 | 93 |
| July..... | 139 | 106 | 145 | 96 | 144 | 116 | 102 | 125 | 94 |
| August..... | 119 | 90 | 123 | 104 | 151 | 119 | 109 | 123 | 93 |
| September..... | 111 | 74 | 121 | 117 | 144 | 123 | 119 | 118 | 91 |

¹ Bureau of Labor Statistics Index with 1296=100, divided by its 1910-14 average of 68.5

² Average weekly earnings, New York State factories. June 1914=100.

³ These indexes are based on retail prices paid by farmers for commodities used in living and production reported quarterly for March, June, September, and December. The indexes for other months are interpolations between the successive quarterly indexes.

⁴ Index of farm real estate taxes, per acre, 1913=100.

⁵ Preliminary.